

Clean Copy of Addition and Amendment to Specification

On page 1, the following paragraph is hereby inserted before "Background of the Invention":

This is a continuation of prior application Serial No. 09/233,4098, filed on January 19, 1999, which is based on U.S. provisional patent application Serial no. 60/071,906, filed on January 20, 1998. The entire disclosure of both applications is incorporated herein by reference.

The paragraph spanning pages 3 and 4 is hereby amended to read as follows:

Probe materials generally are engineered molecular materials that are designed to have an affinity to one or more constituents that may be expected to be found in the tissue, fluid or chemical mix to be analyzed. These probe materials may be made sensitive to specific genes or gene segments through complimentary genetic indicators that have been designed to fluoresce or change color, as observed by the naked eye or by spectrographic analysis methods, when they are linked to a molecule to which they have affinity. A large number of different types and combinations of optically readable probes are being manufactured today that have specific affinity to one or more genes, proteins or other chemicals. In preferred embodiments, the present invention contemplates the use of two classes of probes: (i) protein sensitive probes, such as GFP (green fluorescent probe) from the jellyfish *Aequorea victoria*; and (ii) modified oligonucleotide probes that are fluorogenic, such as those manufactured by SyntheGen LLC, Houston, Texas 77042. Additional probes suited for use in the present invention are available from Midland Certified Reagent Company, Midland, Texas 79701, and Transbio Corp., Blatimore, Maryland 21220. Typically these probes must be used *in vitro* due to either their lack of biocompatibility or because they must be used in conjunction with aggressive reagents that are toxic to cells.